TRANSMITTAL LETTER (General - Patent Pending)	Docket No. 112518-021

In Re Application Of: **Adams, D., et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/668,056	September 21, 2000	Joseph P. Hirl	24573	2121	9810

Title: **EVENT BASED SYSTEM FOR USE WITHIN THE CREATION AND IMPLEMENTATION OF EDUCATIONAL SIMULATIONS**

TO THE DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE:

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Transmittal of Appeal (duplicate); Brief on Appeal (7 pgs) including Appendix A (7 pgs.); and Appendix B (2 pgs,) total pages of Appeal Brief (16 pgs in triplicate); check in the amount of $340.00; return receipt postcard.

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Dated: **October 19, 2004**

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TRANSMITTAL OF APPEAL BRIEF (Large Entity)	Docket No. 112518-021

In Re Application Of: **Adams, D., et al**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/668,056	September 21, 2000	Joseph P. Hirl	24573	2121	9810

Invention:

EVENT BASED SYSTEM FOR USE WITHIN THE CREATION AND IMPLEMENTATION OF EDUCATIONAL SIMULATIONS

COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on

The fee for filing this Appeal Brief is: **$340.00**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Adams, D., et al.
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BRIEF ON APPEAL

Board:

Pursuant to the Notice of Appeal mailed August 19, 2004 in connection with the above-identified patent application, Applicants respectfully submit the instant Brief on Appeal in accordance with 37 C.F.R. § 1.192.

I. Real Party in Interest

SmartForce PLC is the real party in interest to this appeal.

II. Related Appeals and Interferences

There are no related appeals or interferences.

III. Status of the Claims

Claims 1-30 are pending in this application. The pending claims are presented in Appendix A to this Brief. Claims 1-30 stand rejected. Therefore, Claims 1-30 form the subject matter of this appeal.

IV. Status of the Amendments

No amendments were made in this application after the final rejection.

V. Summary of Claimed Subject Matter

A summary of the invention by way of reference to the drawings and specification for each of the independent claims (claims 1, 14, and 29) and each means plus function claim (claims 29 and 30) may be found in Appendix B to this Brief.

Although specification citations are given in accordance with C.F.R. 1.192(c), these reference numerals and citations are merely examples of where support may be found in the specification for the terms used in this section of the brief. There is no intention to suggest in anyway that the terms of the claims are limited to the examples in the specification. Although as demonstrated by the references numerals and citations below, the claims are fully supported by the specification as required by law, it is improper under the law to read limitations from the specification into the claims. Pointing out specification support for the claim terminology as is done here to comply with rule 1.192(c) does not in any way limit the scope of the claims to those examples from which they find support. Nor does this exercise provide a mechanism for circumventing the law precluding reading limitations into the claims from the specification. In short, the references numerals and specification citations are not to be construed as claim limitations or in any way used to limit the scope of the claims.

VI. Grounds of Rejection to be Reviewed On Appeal

1) Claims 1-28 were rejected under 35 U.S.C. §101 for allegedly lacking utility.

2) Claims 1, 3-13, 16, and 18-28 were rejected under 35 U.S.C. §112, ¶1 for allegedly failing to comply with the enablement requirement.

3) Claims 1-30 were rejected under 35 U.S.C. §102 as allegedly being anticipated by Lannert (US 6,029,156).

VII. Arguments

1. Claims 1-28 satisfy the utility requirement of 35 U.S.C. §101.

Claims 1-28 were rejected under 35 U.S.C. §101 due to an allegation that the claims lack patentable utility. The Examiner indicated that these claims are not tangibly embodied in a practical application of the technological arts. The Examiner appears to focus on the "dynamic data model" of the claims. However, the claim must be viewed as a whole. The inclusion of a "dynamic data model" does not render the claim as a whole unpatentable under §101.

In fact, each of the methods recited in claims 1-28 is *embodied in software code.* More specifically claims 1-28 each contain the limitation "providing simulation software code." Software code is a useful, concrete and tangible result (See *AT&T Corp. v. Excel Communications, Inc.,* 172 F.3d 1352, 50 U.S.P.Q.2d (BNA) 1447 (Fed. Cir. 1999), cert. denied 120 S. Ct. 368 (1999). Accordingly, claims 1-28 satisfy the utility requirement of 35 U.S.C. §101.

In addition, each of the methods recited in claims 1-28 recites the *generation of a list of possible statements* in response to a received statement. More specifically claims 1-13 each contain the limitation "generating a list of possible statements in response to the received statement;" and claims 14-28 contain the limitation "generating a list of possible statements for the learner to make." This "list of possible statements" is indeed a useful, concrete and tangible result. For this additional reason, claims 1-28 satisfy the utility requirement of 35 U.S.C. §101.

2. Claims 1, 3-13, 16, and 18-28 satisfy the enablement requirement of 35 U.S.C. §112.

Claims 1, 3-13, 16, and 18-28 were rejected under 35 U.S.C. §112 for allegedly failing to comply with the enablement requirement. Specifically, the Examiner indicated that each of the phrases listed in the first column of the following table are not addressed in the specification. As shown in the second and third columns of the following table, each of these phrases is addressed in the specification and the drawings of the application. Accordingly, claims 1, 3-13, 16, and 18-28 satisfy the enablement requirement of 35 U.S.C. §112.

Claim language allegedly missing from the specification	**Support in specification**	**Support in drawings**
enforced sequence of tasks	"Referring to Figure 2, the tree structure 200 comprises multiple tasks 202, 204. *** Procedural conversations have a required [or enforced] sequence..." (p. 7, ll.; 18-27) * See "new matter" discussion below	Figure 2.
required leaf task	"Finally, tasks may be described as leaf tasks or non-leaf tasks. Leaf tasks are tasks which have no child tasks." (p. 8, ll. 6-7) "In step 454, the algorithm 26 determines whether the current task is a leaf task. *** The algorithm next advances to step 456. In step 456, the algorithm 26 determines whether the task is a required task. If the task is required,..." (p. 10, ll. 13-18)	Figure 2 Step 454 Fig. 4C determines "Is the current task a leaf task?" Subsequent step 456 determines "Is the current task required?"
non-required leaf task	"Finally, tasks may be described as leaf tasks or non-leaf tasks. Leaf tasks are tasks which have no child tasks." (p. 8, ll. 6-7)	Figure 2 Step 454 Fig. 4C determines "Is the current task a leaf task?" Subsequent step 456

	"In step 454, the algorithm 26 determines whether the current task is a leaf task. *** The algorithm next advances to step 456. In step 456, the algorithm 26 determines whether the task is a required task. *** If the current task is not required,..." (p. 10, ll. 13-21)	determines "Is the current task required?"
complete, non-leaf task	"Finally, tasks may be described as leaf tasks or non-leaf tasks. Leaf tasks are tasks which have no child tasks." (p. 8, ll. 6-7) "In step 454, the algorithm 26 determines whether the current task is a leaf task. *** In step 454, if the current task is not a leaf task the algorithm advance to step 466, where the algorithm determines whether the current task is complete. If the current task is complete ..." (p. 10, ll. 13-27)	Figure 2 Step 454 Fig. 4C determines "Is the current task a leaf task?" Subsequent step 466 determines "Is the current task complete?"

incomplete, non-leaf task	"Finally, tasks may be described as leaf tasks or non-leaf tasks. Leaf tasks are tasks which have no child tasks." (p. 8, ll. 6-7) "In step 454, the algorithm 26 determines whether the current task is a leaf task. *** In step 454, if the current task is not a leaf task the algorithm advance to step 466, where the algorithm determines whether the current task is complete. *** If in step 466, the current task is not complete ..." (p. 10, l. 13 – p. 11, l. 2)	Figure 2 Step 454 Fig. 4C determines "Is the current task a leaf task?" Subsequent step 466 determines "Is the current task complete?"

The amendment filed December 8, 2003, was objected to under 35 U.S.C. §132 based on the assertion that new matter was added. In particular, the Office Action asserts that the addition of the word "enforced" to the specification showing its equivalence to the word "required" is new matter. The Applicants respectfully disagree. First, the original claims included the term "enforced sequence" and, thus, this term itself is not new matter. Additionally, the term "required sequence" was used in the original specification to describe the same claimed concept as "enforced sequence." Thus, this amendment is merely a rephrasing of the original description, which is not considered new matter under proper examination procedure (See MPEP §2163.07). Moreover, the terms "required" and "enforced" are not "quite different" as alleged in the Office Action. The Office action expediently referred to only certain definitions of these words from the dictionary. In fact, referring to the same dictionary, a definition of "required" is to "compel", which is also a definition of "enforce" in this dictionary, and this is the import of the meaning of these terms in the present specification. Thus, these words are, in fact, synonymous as used in the specification. Accordingly the Applicants respectfully request reconsideration and withdrawal of this objection.

3. Claims 1-30 are patentable under 35 U.S.C. §102 over Lannert (US 6,029,156).

Claims 1-30 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Lannert et al. (U.S. Patent No. 6,029,156). The Examiner asserts that Lannert et al. discloses all of the elements of these claims. In particular, the Examiner asserts that Lannert et al., among other things, teaches generation of a list of possible statements in response to a received statement for a learner to make from statements contained within a dynamic data model. In support of this assertion, the Examiner references column 11, lines 23-36 of Lannert.

However, Lannert does not actually teach the generation of a list of possible statements in response to a received statement *for the learner to make* as recited by the claims. Instead, Lannert merely teaches in general terms a simulation model. The Intelligent Coaching Agent (ICA) taught by Lannert, for example, merely generates *feedback* based on a set of rules. This feedback is not used by a learner in the teachings of Lannert as the next set of inputs to the simulation (i.e., as statements for the learner to make). Accordingly, Applicants respectfully submit that this element, for example, is not taught or suggested by Lannert et al. Accordingly, claims 1-30 are patentable under 35 U.S.C. §102 over Lannert (US 6,029,156).

Conclusion

In view of the foregoing remarks, it is respectfully submitted that each of the rejections of claims 1-30 are based on legal and factual errors, and that all of the pending claims should be allowed.

Respectfully submitted,

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Dated: October 19, 2004

APPENDIX A

1. A method of providing a conversation in an educational simulation for a learner comprising the steps of:

providing simulation software code;

providing a dynamic data model comprising tasks and statements;

receiving a statement made by the learner; and

generating a list of possible statements in response to the received statement for the learner to make from the statements contained within the dynamic data model based on at least one of:

a. whether the current conversation has an enforced sequence of tasks,

b. whether the current task allows the learner to move to a sibling task,

c. whether the current conversation requires completion;

d. whether the current task is a leaf task,

e. whether the current task is a required task, or

f. whether the task is complete.

2. The method of claim 1 wherein the dynamic data model is independent from the simulation software code.

3. The method of claim 1 wherein the list of possible statements comprises candidate statements of the current task when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task.

4. The method of claim 1 wherein the list of possible statements comprises candidate statements of the current task and invoking statements of uninvoked sibling tasks when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a required leaf task.

5. The method of claim 1 wherein the list of possible statements comprises candidate statements of the nearest incomplete ancestor task of the current task when the

conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a non-required, leaf task.

6. The method of claim 1 wherein the list of possible statements comprises candidate statements of the nearest incomplete ancestor task of the current task and invoking statements of uninvoked sibling tasks of the nearest incomplete ancestor task of the current task when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a complete, non-leaf task.

7. The method of claim 1 wherein the list of possible statements comprises candidate statements of the current task and invoking statements of uninvoked sibling tasks of the nearest incomplete ancestor task of the current task when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a required, incomplete, non-leaf task.

8. The method of claim 1 wherein the list of possible statements comprises transition and candidate statements of the nearest required ancestor task of the current task when the conversation does not have an enforced sequence of tasks and the task does not allow the learner to move to a sibling task and the task is a leaf task.

9. The method of claim 1 wherein the list of possible statements comprises candidate statements of the nearest required ancestor task of the current task when the conversation does not have an enforced sequence of tasks and the task does not allow the learner to move to a sibling task and the task is a non-leaf task.

10. The method of claim 1 wherein the list of possible statements comprises candidate and transition statements of the nearest incomplete ancestor task and invoking statements of the sibling tasks of the nearest incomplete ancestor task when the conversation does not have an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a required leaf task.

11. The method of claim 1 wherein the list of possible statements comprises candidate and transition statements of the nearest incomplete ancestor task when the conversation does not have an enforced sequence of tasks and the task allows the learne to move to a sibling task and the task is a non-required, leaf task.

12. The method of claim 1 wherein the list of possible statements comprises candidate statements of a nearest incomplete ancestor task, invoking statements of uninvoked sibling tasks of the nearest incomplete ancestor task, and transition statements of active sibling tasks of the nearest incomplete ancestor when the conversation does not have an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a complete, non-leaf task.

13. The method of claim 1 wherein the list of possible statements comprises candidate statements of the current task, invoking statements of uninvoked sibling tasks of the current task, and transition statements of active sibling tasks of the current task when the conversation does not have an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is an incomplete, non-leaf task.

14. A method of providing a conversation in an educational simulation for a learner comprising the steps of:

providing simulation software code;

providing a dynamic data model comprising tasks and statements;

receiving a statement made by the learner; and

generating a list of possible statements for the learner to make from the statements within the dynamic data model.

15. The method of claim 14 further comprising the step of determining whether the received statement completes a current task.

16. The method of claim 15 wherein the step of generating a list of possible statements for the learner to make from the statements of the dynamic data model further comprises the steps of:

determining whether a current conversation is has an enforced sequence of tasks;

determining whether the current conversation is the conversation requires completion or the conversation does not require completion;

determining whether the current task is a leaf task or a non-leaf task;

determining whether current task is a required task;

generating the list of possible statements based on at least one of the previously determined factors of:

a. whether the conversation has an enforced sequence of tasks,

b. whether the current conversation is the conversation does not require completion or the conversation requires completion,

c. whether the current conversation requires completion;

d. whether the current task is a leaf or non-leaf task,

e. whether the current task is a required task, and

f. whether the task is complete.

17. The method of claim 16 wherein the dynamic data model is independent from the simulation software code.

18. The method of claim 16 wherein the list of possible statements comprises candidate statements of the current task when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task.

19. The method of claim 16 wherein the list of possible statements comprises candidate statements of the current task and invoking statements of uninvoked sibling tasks when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a required leaf task.

20. The method of claim 16 wherein the list of possible statements comprises candidate statements of the nearest incomplete ancestor task of the current task when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a non-required, leaf task.

21. The method of claim 16 wherein the list of possible statements comprises candidate statements of the nearest incomplete ancestor task of the current task and invoking statements of uninvoked sibling tasks of the nearest incomplete ancestor task of the current task when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a complete, non-leaf task.

22. The method of claim 16 wherein the list of possible statements comprises candidate statements of the current task and invoking statements of uninvoked sibling tasks of the nearest incomplete ancestor task of the current task when the conversation has an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a required, incomplete, non-leaf task.

23. The method of claim 16 wherein the list of possible statements comprises transition and candidate statements of the nearest required ancestor task of the current task when the conversation does not have an enforced sequence of tasks and the task does not allow the learner to move to a sibling task and the task is a leaf task.

24. The method of claim 16 wherein the list of possible statements comprises candidate statements of the nearest required ancestor task of the current task when the conversation does not have an enforced sequence of tasks and the task does not allow the learner to move to a sibling task and the task is a non-leaf task.

25. The method of claim 16 wherein the list of possible statements comprises candidate and transition statements of the nearest incomplete ancestor task and invoking statements of the sibling tasks of the nearest incomplete ancestor task when the conversation

does not have an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a required leaf task.

26. The method of claim 16 wherein the list of possible statements comprises candidate and transition statements of the nearest incomplete ancestor task when the conversation does not have an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a non-required, leaf task.

27. The method of claim 16 wherein the list of possible statements comprises candidate statements of a nearest incomplete ancestor task, invoking statements of uninvoked sibling tasks of the nearest incomplete ancestor task, and transition statements of active sibling tasks of the nearest incomplete ancestor when the conversation does not have an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is a complete, non-leaf task.

28. The method of claim 16 wherein the list of possible statements comprises candidate statements of the current task, invoking statements of uninvoked sibling tasks of the current task, and transition statements of active sibling tasks of the current task when the conversation does not have an enforced sequence of tasks and the task allows the learner to move to a sibling task and the task is an incomplete, non-leaf task.

29. A system for creating a conversation in an educational simulation for a learner comprising:

means for providing simulation software code;

means for providing a dynamic data model comprising tasks and statements; means for receiving a statement made by the learner; and

means for generating a list of possible statements for the learner to make from the statements within the dynamic data model.

30. The system of claim 29 further comprising means for determining whether the received statement completes a current task.

APPENDIX B

Claim 1	Drawings	Specification
A method of providing a conversation in an educational simulation for a learner comprising the steps of:	Figures 4a-4e	Page 8, line 21 – page 13, line 2
providing simulation software code;	Figures 1 and 3	Page 4, line 12 – page 5, line 15 Page 6, lines 3-10
providing a dynamic data model comprising tasks and statements;	Figure 2	Page 5, line 16 – page 6, line 2 Page 7, line 17 – page 8, line 20
receiving a statement made by the learner; and	Figure 4a	Page 8, lines 21 – 28
generating a list of possible statements in response to the received statement for the learner to make from the statements contained within the dynamic data model based on at least one of: a. whether the current conversation has an enforced sequence of tasks, b. whether the current task allows the learner to move to a sibling task, c. whether the current conversation requires completion; d. whether the current task is a leaf task, e. whether the current task is a required task, or f. whether the task is complete.	Figures 4c-4e	Page 9, line 26 – page 12, line 27
Claim 14	**Drawings**	**Specification**
A method of providing a conversation in an educational simulation for a learner comprising the steps of:	Figures 4a-4e	Page 8, line 21 – page 13, line 2
providing simulation software code;	Figures 1 and 3	Page 4, line 12 – page 5, line 15 Page 6, lines 3-10

providing a dynamic data model comprising tasks and statements;	Figure 2	Page 5, line 16 – page 6, line 2 Page 7, line 17 – page 8, line 20
receiving a statement made by the learner; and	Figure 4a	Page 8, lines 21 – 28
generating a list of possible statements for the learner to make from the statements within the dynamic data model.	Figures 4c-4e	Page 9, line 26 – page 12, line 27
Claim 29	**Drawings**	**Specification**
A system for creating a conversation in an educational simulation for a learner comprising:	Figures 4a-4e	Page 8, line 21 – page 13, line 2
means for providing simulation software code;	Figures 1 and 3	Page 4, line 12 – page 5, line 15 Page 6, lines 3-10
means for providing a dynamic data model comprising tasks and statements;	Figure 2	Page 5, line 16 – page 6, line 2 Page 7, line 17 – page 8, line 20
means for receiving a statement made by the learner; and	Figure 4a	Page 8, lines 21 – 28
means for generating a list of possible statements for the learner to make from the statements within the dynamic data model.	Figures 4c-4e	Page 9, line 26 – page 12, line 27
Claim 30	**Drawings**	**Specification**
The system of claim 29 further comprising means for determining whether the received statement completes a current task.	Figure 4c step 450	Page 10, line 6